

FEMA'S FLOOD HAZARD MAPPING PROGRAM MAPPING NEEDS ASSESSMENT PROCESS

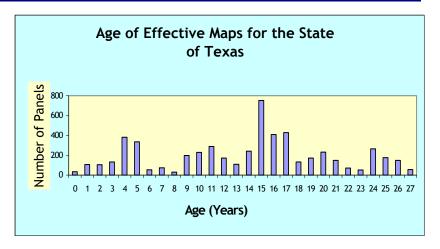
Mapping NEEDS ASSESSMENT PROCESS ASSESSMENT

Texas State Profile

Spring 2002

Texas's Flood Insurance Rate Maps (FIRMs) are aging. Seventy-one percent (71%) of the State's FIRMs are greater than 10 years old. The result of the aging is that the maps may not accurately reflect flood hazard conditions, potentially creating a false sense of security and placing buildings, infrastructure, and individuals at risk.

Flood hazards are dynamic and may change rapidly due to community development as well as natural processes in the watershed. Up-to-date flood maps are crucial to comprehensive floodplain management.



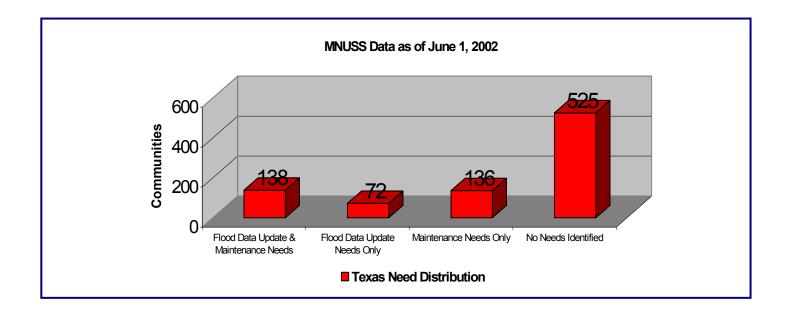
THE MAPPING NEEDS ASSESSMENT PROCESS

- In Section 575 of the National Flood Insurance Reform Act of 1994, the U.S. Congress mandated the Director of FEMA to "....once during each 5-year period...assess the need to revise and update all floodplain areas and flood risk zones identified, delineated, or established under this section, based on an analysis of all natural hazards affecting flood risks..."
- The Mapping Needs Assessment process helps FEMA develop map update priorities and expend the flood mapping budget in the most cost-beneficial manner. The Mapping Needs Assessment process identifies, inventories, and prioritizes flood hazard mapping needs nationwide, using the Mapping Needs Update Support System (MNUSS).
- MNUSS prioritizes individual communities (e.g., cities, towns, villages, and unincorporated counties that have land use authority) based upon a quantitative comparison of the benefits of addressing a community's cumulative mapping needs to the costs of revising the community's maps against all other communities participating in the National Flood Insurance Program (NFIP).

DATA COLLECTED FOR NFIP COMMUNITIES IN TEXAS

Approximately 919 mapped NFIP communities in the State of *Texas* were contacted by FEMA during the 1994-1999 period and 293 (32%) of those communities responded. Flood mapping needs are categorized as either flood data update needs (i.e., changes to the floodplain and/or watershed) or maintenance needs (i.e., non-engineering reference features, such as adding streets to panels or changing corporate limits). Some communities indicated that no updates to their flood hazard maps were needed at that time. Since that time, FEMA has continued to collect mapping needs through FEMA Regional Offices, States, Cooperating Technical Partners, and other agencies.

It is anticipated that the Biennial Report will be distributed to NFIP communities during calendar year 2002. Section I of the Biennial Report focuses on changes and activities in the community's flood hazard areas and the accuracy of the community's flood hazard maps. Communities will be able to complete and submit the report electronically, or return it in hardcopy format. FEMA will use the collected information in various ways, such as: identifying communities that need to be re-mapped or have additional flood hazards, developing mapping priorities, identifying communities that need technical assistance or have training needs, and providing qualitative data that FEMA can use to assess and evaluate national progress in floodplain management. In addition, FEMA may be contacting communities for clarification or elaboration of the information provided in the Biennial Report.



CURRENT INITIATIVES

FEMA has been working closely with the Harris County Flood Control District to ensure accurate flood hazard information is presented on the FIRM for Harris County, Texas and Incorporated Areas. The District began participating in what is now the Cooperating Technical Partner (CTP) Program and has undertaken five mapping-related projects, the most significant of which is the Tropical Storm Allison Recover Project. The project involves a rapid restudy of approximately 1,100 stream miles in 22 impacted watersheds.

UNMAPPED COMMUNITIES

In 1997, FEMA investigated the nationwide extent of unmapped communities. For the initial high-level analysis, FEMA compared U.S. Census Bureau data to information in the Agency's Community Information System (CIS) to determine which communities did not have flood hazard maps. It was estimated that approximately 6,090 communities were not mapped because they:

- (1) have not been assigned a Community Identification (CID) number and have not been provided with a flood hazard map;
- (2) have been assigned a CID number, but have not been provided with a flood hazard map; or
- (3) have been assigned a CID number and are known to have flood hazards, but the flood hazards are undetermined (Zone D).

In 2001, FEMA's Map Service Center (MSC) developed a "Geo-index" that spatially plotted effective flood hazard map indexes with the corporate boundaries of unmapped communities of the nation for their web-based map store. It also gave FEMA an ideal way of determining land areas that are currently not shown on the flood maps. With this information, FEMA compared the list compiled in 1997 with the 2001 Geo-index list of unmapped areas. The findings, so far, have been that some of these unmapped areas are not truly NFIP communities (defined as any state or political subdivision, thereof, or any tribal nation or authorized tribal organization that has authority to adopt and enforce floodplain management regulations for areas within its jurisdiction) and are shown on the flood maps of the presiding community. Others have not been mapped at all, and are confirmed unmapped communities. Still, there are some areas that FEMA has not confirmed as being communities with land use authority. FEMA is now looking to its Regional offices, and State NFIP Coordinators, to use their local knowledge to help define these areas.

Currently, for the State of *Texas*, 627 areas have been identified as potential unmapped communities. An unmapped community function of MNUSS is currently being tested, and will be available for use by the FEMA Regional Offices and State NFIP Coordinators. In this function of the database, the land use authority for each community, searchable by State and county, may be confirmed. Additionally, for those communities with land use authority, data pertaining to mapping needs, population, land-area, and other information is provided so that these communities may also be prioritized by FEMA for flood hazard mapping.